

## 5A Schottky Barrier Rectifiers

### Features

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- RoHS Compliant



DO-201AD



### Mechanical Data

<b>Case:</b>	DO-201AD, Molded Plastic
<b>Epoxy:</b>	UL 94V-0 rate flame retardant
<b>Terminals:</b>	Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	1.2 grams

### Maximum Ratings and Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless noted otherwise)

Symbol	Description	TSR 520	TSR 530	TSR 540	TSR 550	TSR 560	TSR 580	Unit	Conditions
<b>VRRM</b>	Max. Recurrent Peak Reverse Voltage	20	30	40	50	60	80	V	
<b>VRMS</b>	Max. RMS Voltage	14	21	28	35	42	56	V	
<b>VDC</b>	Max. DC Blocking Voltage	20	30	40	50	60	80	V	
<b>I<sub>AV</sub></b>	Max. Average Forward Rectified Current (FIG.1)	5.0						A	
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	150						A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	0.55			0.70		0.85	V	I <sub>F</sub> =5.0 A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	0.5						mA	TA=25° C
		50							TA=125° C

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## TSR520 - TSR580

Symbol	Description	TSR 520	TSR 530	TSR 540	TSR 550	TSR 560	TSR 580	Unit	Conditions
<b>C<sub>J</sub></b>	Typical Junction Capacitance	380						pF	V <sub>R</sub> =4V, f=1MHz
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance	10						°C / W	Note
<b>T<sub>J</sub></b>	Operating Junction Temperature Range	-65 to +125			-65 to +150			°C	
<b>T<sub>stg</sub></b>	Storage Temperature Range	-65 to +150							

**Note:** Thermal resistance junction to ambient vertical P.C. board mounting 0.5" (12.7mm) lead length.

### Typical Characteristics Curves

Fig.1- Typical Forward Current Derating Curve

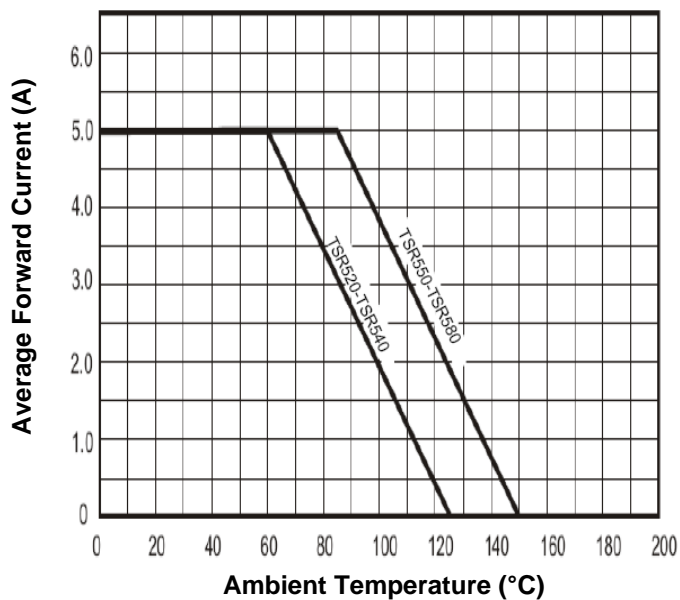
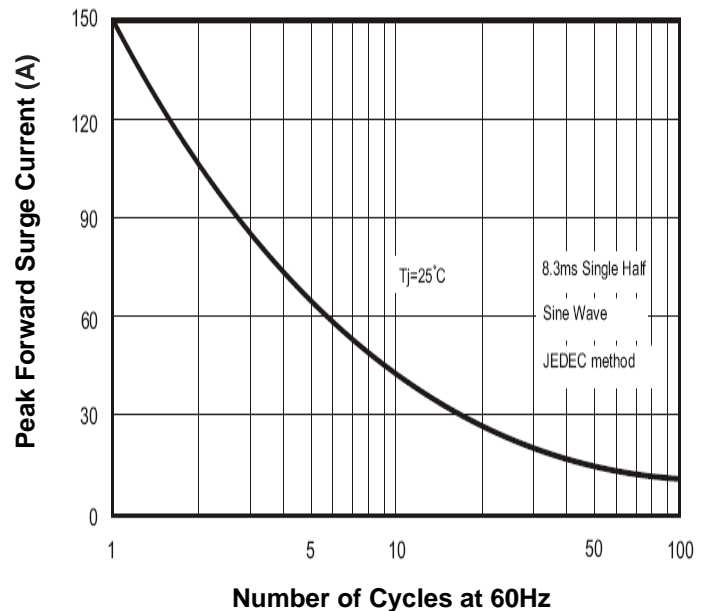


Fig.2- Maximum Non-repetitive Peak Forward Surge Current



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## TSR520 - TSR580

Fig.3- Typical Instantaneous Forward Characteristics

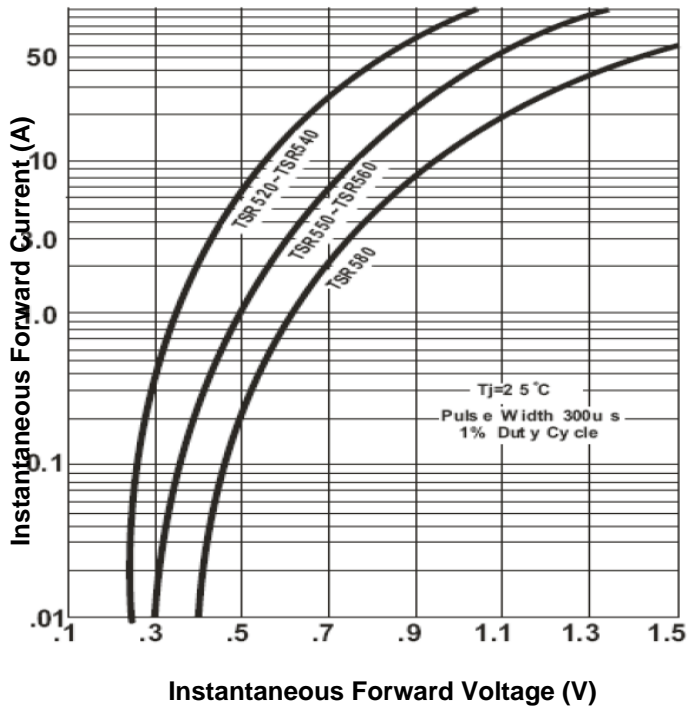


Fig.4- Typical Reverse Current

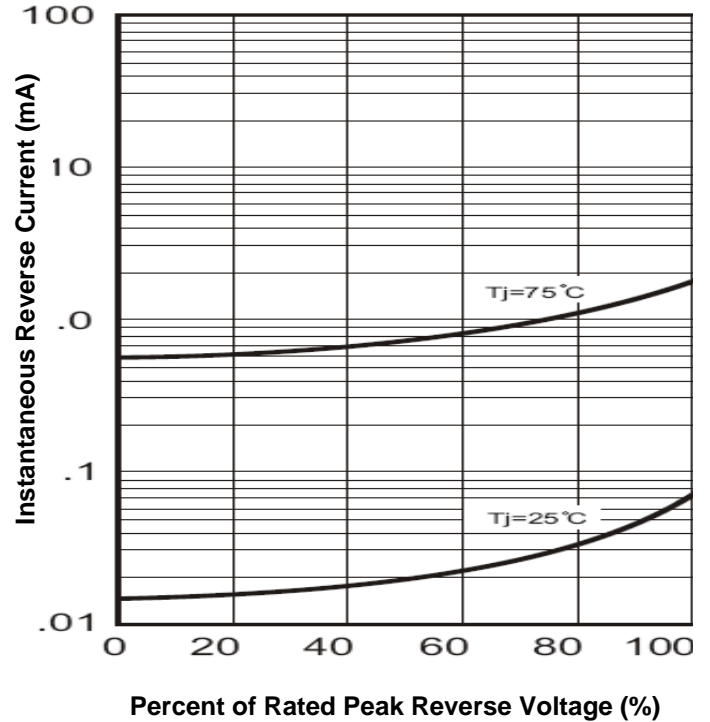
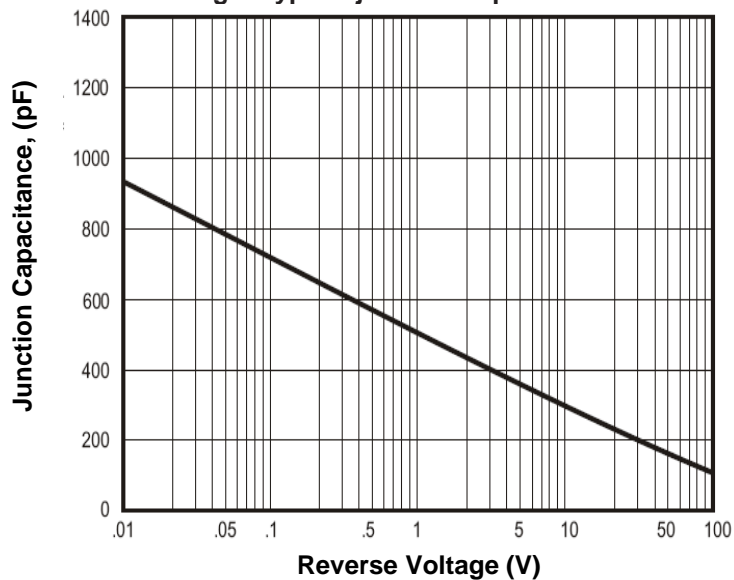


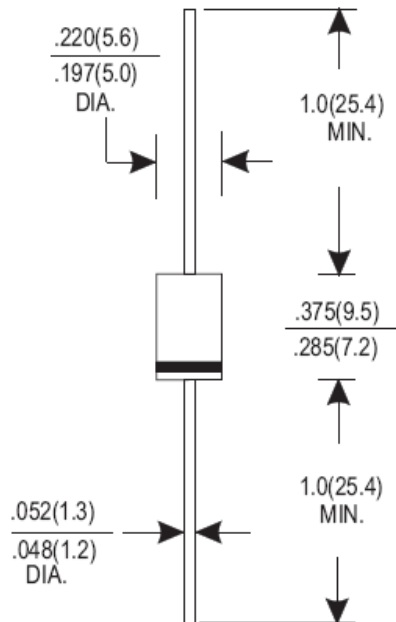
Fig.5-Typical junction capacitance



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## TSR520 - TSR580

### Dimensions in inches (mm)



DO-201AD

### How to contact us

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